

**Sciences and Exploration Data Analysis
(SESDA-II)
Government Surveillance Plan
NNG11341433R**

FOREWARD

Under performance-based contracts, such as this one, the contractor assumes more responsibility and greater risk in exchange for more flexibility and less direct Government involvement in contract activities. However, the Government still has a responsibility to conduct surveillance. Surveillance spans a spectrum of Government involvement. Surveillance may be as simple as inspecting a delivered support or service at acceptance or as complex as continually monitoring contractor performance. To meet this responsibility, the Government needs to understand the risks involved in the Contractor's activity and how the Contractor is managing those risks.

This Surveillance Plan has been prepared to describe the Government's surveillance of this contract. It is a "living" document that will be tailored to the contractor selected. The Government welcomes suggestions for improving this Plan. Of particular interest are ideas on what information the Government should monitor (i.e., metrics) and how the Government can most cost-effectively obtain the relevant performance data it needs.

1.0. INTRODUCTION

1.1 Purpose

The purpose of this Surveillance Plan is to define the overall approach and identify specific techniques that NASA Goddard Space Flight Center (GSFC) intends to use to monitor contractor performance under the resultant contract of RFP NNG11341433R. This plan defines the process the Government expects to follow to obtain data, evaluate the contractor, and determine if contract performance is acceptable. The goal is to balance the level of Government surveillance with the perceived impacts and risks associated with performance hereunder. The Government reserves the right to modify this Plan at any time during the contract.

1.2 Scope

This plan identifies program requirements, strategy, resources, review and control processes, and surveillance activities for continuous measurement of contractor performance under the contract. It is intended to be a “living” document from which resources and activities will evolve from one phase to another during the life of the contract. The plan will be updated as required. The surveillance program addresses all elements of the contract, including the following:

1.3 Program Definition and Contract Description

The purpose of this contract is to provide support to NASA GSFC's Sciences and Exploration programs and enterprises under a performance based contracting arrangement. The period of performance for this contract is 3 years with 1 two-year option and will be performed on-site in Greenbelt, MD and at the contractor's off-site facility. The services required under this contract support all the science disciplines within Code 600, including solar and space plasma physics, astrophysics and astronomy, planetary systems studies, astrobiology, atmospheric science and climatology, oceanography, land processes, geodynamics, and solid earth geophysics. Research and information technology support services includes scientific data analysis, modeling and simulation of physical processes, development and testing of flight project instrument and data systems, field experiments, development and operations of large-scale data management, archival and delivery systems, systems analysis, and programming; and includes engineering, technology, development and research network engineering, and education and outreach. The contractor shall support both ongoing and new projects as required in all these areas.

1.4 Guiding Directives

The guiding documents for this surveillance effort include the contract's Statement of Work (SOW) and SOW Addendum, the functional description of the work identifying the objectives or results desired from the Identification Numbers issued against this contract and the deliverable requirements specified therein.

2.0 Surveillance Strategy Definitions

2.1 Insight

Insight is an assurance process that uses performance requirements and if definable, performance metrics to ensure process capability, product quality and end-item effectiveness. Insight relies on gathering a minimum set of product or process data that provides adequate visibility into the integrity of the product or process. The data may be acquired from contractor records, usually in a non-intrusive parallel method.

Insight as applied to this contract and the work to be performed therein will result in lower levels of Government surveillance and allow the contractor to assume increased responsibility and accountability for the integrity of processes and/or products. Insight will rely heavily on evaluating planned contract deliverables and existing contractor procedures and working documents, if available.

2.2 Oversight

Oversight as applied to this contract and the work to be performed therein will result in higher levels of Government surveillance. The Government will gather information pertaining to the contractor's process through on-site involvement and/or inspection in the process and will monitor the process itself. The Government's involvement in the contractor's performance, through oversight will be determined necessary by the Contracting Officer's Technical Representative.

3.0 RESOURCES

3.1 General

All surveillance activities will be implemented using Government personnel and resources at Goddard Space Flight Center (GSFC) and, if Resident Office or Defense Contract Management Agency (DCMA) personnel are involved, at the Contractor's facility. The surveillance team may be composed of:

- a GSFC Sciences and Exploration Directorate (i.e., contracting officer's technical representative, Work Monitor(s), financial analyst(s)).
- b GSFC Safety & Health support personnel.
- c Resident Office or Defense Contract Management Agency (DCMA) personnel at the Contractor's facility

3.2 Surveillance Team

The surveillance team will be composed of key government personnel representing the Sciences and Exploration Directorate and the Sciences and Exploration Procurement Office. The team's primary purpose will be to provide direction for contract surveillance activities and to serve as the Government's

focal point in reviewing and evaluating overall contractor performance under the contract. The team will obtain information from various sources, including deliverable contractor documents, communications with the contractor, and reports by other personnel or representatives (e.g., Work Monitors, GSFC Health & Safety personnel, DCMA, EEO Personnel) who interact with the contractor.

All available information will be evaluated, and any action by GSFC will be determined based upon the scope and magnitude of any particular issue or problem. The surveillance team chairperson (COTR) will formally notify the Contracting Officer of situations where it is perceived that the Contractor has failed to take prudent corrective or preventive action, of situations perceived to increase risk, or of findings of continued contractual non-compliance.

3.3 Defense Contract Management Agency (DCMA), if participating

A DCMA representative may be collocated with the Contractor. The DCMA representative may support the Contracting Officer with the surveillance effort in accordance with the provisions of the GSFC Letter of Delegation and this plan.

4.0 SURVEILLANCE STRATEGY AND APPROACH

4.1 General

The level of risk and the impact of failure are major determinants in helping define the type of surveillance to be conducted. Clearly, if the impact of failure is minor and the level of risk is low, only a small amount of insight-driven surveillance would normally be needed. Conversely, if the impact of failure could be significant and the level of risk is high, more extensive surveillance (including possible oversight surveillance) is warranted.

GSFC will strive to use an insight-driven surveillance approach throughout the contract period of performance. The overall surveillance goal will be to obtain objective evidence and data that enable the Government to determine whether the contractor's program and processes are functioning as intended in accordance with the terms of the contract. The focus will be on prevention rather than detection, i.e., emphasizing controlled processes and methods of operation, as opposed to relying solely upon inspection and test to identify problems.

Surveillance team members will have open access to all areas in which this contract is being performed and will interface directly with their Contractor counterparts. They will document problems, concerns and issues, and take note of contractor accomplishments. They will collect performance metric data, where applicable and will participate in contractor review meetings, such as those described herein. Information will flow from individual team members through the COTR to surveillance team representatives, who will present issues and achievements at surveillance team meetings. Information gained from these formal and informal exchanges of ideas and collection of data will be compiled and evaluated as a continuous measure of contract performance.

The COTR will annually complete a NASA Form 1680, entitled, "Contractor Performance Assessment" which will also be reviewed by the contractor, and become a part of the active GSFC data base of Contractor Performance Assessments.

4.2 Forms of Surveillance

Support of the SESDA-III contract surveillance will take the following forms:

4.2.1 Communications

- Informal discussions
- Electronic mail
- Surveillance team meetings
- Progress reviews
- Technical information meetings
- Customer Surveys
- Other communication methods, as needed

4.2.2 Evaluation and Reporting

- Review of deliverables from contract data requirements list
- Review of identification number-unique products/documentation
- Documentation of problems, issues and concerns
- Data collection reporting
- Customer Survey Feedback

5.0 SELECTED SURVEILLANCE ACTIVITIES

The following selected activities will be performed by various surveillance team members during applicable stages of contract performance:

Area of Risk Identified	Surveillance Team Activity	Impact to Government
Engineer support: Design and implementation for instruments and other hardware supporting flight missions.	Review documents supporting the design, development, fabrication, subsystems, performance and verification.	a. Delay of flight missions b. Inability to meet data delivery requirements or NASA Performance Metrics

Area of Risk Identified	Surveillance Team Activity	Impact to Government
Database Creation and Data Archival: Maintenance of Database creation and archival systems	Review system access methods and reliability to end-users.	Poor data system reliability results in loss of staff productivity and, if severe, delays in delivery or even loss of data.
Computer System Management: Maintenance of Operating Systems and System Security defensives	All GSFC end-users should have access to all authorized systems and be fully alert of scheduled system downtime or slow response. The Surveillance team will review computer security plans and procedures, security reports, and response time to security, and/or personnel training.	Poor data system reliability results in loss of staff productivity and, if severe, delays in data production and delivery or even loss of data.
Production Processing: Maintenance of Processing Systems	All GSFC end-users should have access to all authorized systems and be fully alert of scheduled system downtime or slow response. The Surveillance team will review, operations procedures, and/or forecast production workloads versus completion.	Poor data system reliability or inadequate processing throughput result in loss of staff productivity and, if severe, delays in data production and delivery or even loss of data.

Area of Risk Identified	Surveillance Team Activity	Impact to Government
Quality of Work Force	<p>Surveillance team will do the following:</p> <ul style="list-style-type: none"> a. Assess Contractor efforts to train staff in areas of required expertise. 	<ul style="list-style-type: none"> I. Unfilled positions: <ul style="list-style-type: none"> a. Inability to meet commitments on scheduled deliverables or science results including NASA Performance Metrics b. Additional cost resulting from decreased productivity of other staff reliant on unfilled staff positions II. Inadequate experience or expertise: <ul style="list-style-type: none"> a. Same as Ia. b. Same as Ib. c. Poorer data quality, derived products, through impacts on algorithm development & evaluation b. Delayed data delivery and poor data quality also impacts NASA supported research outside GSFC
Cost	<p>Cost Overrun: The Contracting Officer's Technical Representative (COTR), the Work Monitors(s) and the contracts financial analyst will evaluate and monitor costs incurred on a monthly basis resulting from NASA financial reporting requirements due from the contractor on a monthly and quarterly basis.</p>	<ul style="list-style-type: none"> a. De-scope contract

Surveillance team members will have broad background and experience working with projects and/or programs supported by contractor under contract number **TBD**. They will participate in review

meetings, such as those described in Section 4.0. They will provide assistance, as necessary, with the development and approval of technical specifications, flow-down of requirements, and with design, development, production and test activities. They will also maintain insight into the contractor's compliance with relevant deliverables submitted under the contract. When the Government has concerns regarding contractor performance, surveillance team members may conduct independent audits of the contractor's activities, processes, products, documentation and data in order to provide assurance that the program is being implemented according to all requirements and specifications. These audits will normally be conducted with advance notification and coordinated with the contractor. However, the Government reserves the right to conduct unscheduled audits when evidence indicates that contractor performance is deficient.

5.1 Performance Verification

The term 'Performance Verification' in the context of this plan refers to the activities related to the insight activities. Additionally, specific performance requirements are provided in the SOW and the SOW Addendum B. Audits as described above may be considered necessary for performance verification.

5.2 Safety

The responsibility for meeting all safety requirements rests with the contractor. Surveillance team safety engineers and technical personnel (Code 350 personnel) will review contractor-generated hazard analyses, safety compliance data packages or other safety-related documentation, as appropriate, to help ensure all safety requirements have been satisfied. Surveillance team personnel will also maintain insight into the contractor's safety activities through the review of the Contractor's submitted Health and Safety Plan as required by this contract.

6.0 SUMMARY

This Surveillance Plan describes the approach NASA Goddard Space Flight Center (GSFC) intends to use to monitor SESDA-III contract and assure that the Contractor performs in accordance with terms and conditions of the Contract. GSFC anticipates using an insight surveillance approach. The goal is to balance the level of Government surveillance with the perceived impacts and risks of mission failure.

GSFC plans to utilize a surveillance team to evaluate Contractor performance and direct surveillance activities. The team will be supported by Work Monitor to obtain data and provide information on Contractor activities. The team will establish and rely on subjective performance metrics against each Work Activity Identification Number issued and assess Contractor performance against expectations.

As experience is gained with the Contractor, or new Work Activity Identification Numbers are issued against this contract, the Government reserves the right to change this Surveillance Plan and the metrics used to evaluate Contractor performance.